Product Manager Clothing and Individual Equipment

Army Combat Shirt (ACS)



Specifications

Component materials (FR treated):

Torso and neck material: 43.5% cotton, 43.5% rayon, 8% spandex, and 5% polyester. Sleeve, shoulder and side panel: 95% cotton and 5% spandex. Modesty panel: 47.5% cotton, 47.5% rayon, and 5% spandex.

Color: Universal camouflage pattern and foliage green

Sizes: X-small, small, medium, large, X-large, XX-large, XX-large

Status: The ACS is in production. Fielding priority will be determined by Department of the Army.

The Fire Resistant (FR) Army Combat Shirt (ACS) provides the Soldier improved comfort and enhanced flame and thermal protection. The torso is made of a moisture-wicking cotton/rayon blend that increases moisture vapor transmission, heat stress relief, and comfort when worn with the Interceptor Body Armor. The FR sleeves are in the universal camouflage pattern and have integrated anti-abrasion elbow pads, cargo pockets, infrared identification tags, and hook-and-loop fasteners for the name, rank, unit patch, and American flag. The shirt also features flat-seam shoulders and side panels for comfort, and is treated using a state-of-the-art FR process that fuses to the fibers. It is washable and maintains its flame resistance for the life of the garment.







Cutting-Edge Fire-Resistant Combat Shirt Fielded To Soldiers

Fort Belvoir, VA (Sept. 12) – To reduce the incidence and severity of burn injuries resulting from improvised explosive devices, and to help Soldiers combat heat stress, the Army has approved the Army Combat Shirt (ACS) for wear under a Soldier's Interceptor Body Armor (IBA). The Army plans to issue two of the moisture-wicking, fire-resistant shirts to each deploying Soldier, according to Program Executive Office (PEO) Soldier, which was responsible for developing the shirt.

PEO Soldier is currently shipping the ACS to Iraq and Afghanistan to fulfill urgent requirements. It is expected that in 2009, the Army will add the ACS to the list of Rapid Fielding Initiative (RFI) items that are provided to all deploying Soldiers.

The Army worked closely with medical specialists and leaders in the textile industry to design the ACS, employing state-of-the-art fire-resistant technologies and cutting-edge manufacturing processes to improve Soldiers' protection and comfort on the battlefield. The unique production process fuses flame-suppressant gas compounds to fibers deep within the shirt's fabric, increasing fire protection while maintaining comfort and maneuverability.

PEO Soldier's Soldier-as-a-System concept, used throughout the design and development of the ACS, ensures that clothing and equipment work together for maximum efficiency and combat effectiveness. The ACS is worn under IBA instead of the Army Combat Uniform or the Army Aircrew Combat Uniform jacket and standard-issue T-shirt, reducing bulk for Soldiers operating in extreme climates.

The ACS features rugged fire-resistant technology on the sleeves. In addition, the torso, which is also fire-resistant, is made of a high-performance fabric that provides maximum breathability and moisture-wicking ability. "This shirt will significantly reduce heat stress and maximize comfort when wearing IBA, thereby increasing our Soldiers' effectiveness in battle," said MAJ Clay Williamson, an assistant product manager for Product Manager Clothing and Individual Equipment (PM CIE), the PEO Soldier office that developed the ACS and works on other fire-resistant uniform items.

Reports from Soldiers who tested the shirt during development led to several important improvements. For example, some Soldiers with larger builds commented that the sleeves were too tight. In response, the sleeves are now looser overall, and adjustable cuff closures have been added. A more comfortable mock turtleneck was also incorporated into the ACS, based on the advice of wearers.

PM CIE is now investigating new technologies that will further enhance the protective and performance qualities of the ACS. In the works are a possible winter version of the ACS and an extreme version that would incorporate ballistic protection and even bio-physiological sensors to record, for example, the wearer's temperature and heart rate.

Headquartered at Fort Belvoir, VA, PEO Soldier designs, develops, procures, fields, and sustains virtually everything the Soldier wears or carries. By employing innovative concepts and technologies, PEO Soldier has made great strides in quickly getting improved equipment into the hands of Soldiers when and where they need it.

